

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1-11. (Canceled)

12. (Currently amended) A method of performing a catheter-based procedure to a particular treatment site within a patient comprising:

providing a catheter comprising a tubular shaft having a proximal end and a distal end and a radially extendible tissue engagement mechanism at its distal end, the radially extendible tissue engagement mechanism comprising a plurality of resilient members configured to be selectively engaged so that the resilient members extend radially outward from a longitudinal axis, each having proximal and distal ends, all distal ends joined together and fixed longitudinally and all proximal ends joined together at a position proximal to the distal end such that the resilient members lie parallel to the longitudinal axis when unloaded and such that the resilient members bow radially outward when a compressive load is applied to them;

navigating the catheter so that the distal end is adjacent to the intended treatment site;

causing the tissue engagement mechanism to extend into engagement with the tissue adjacent to the treatment site; and

performing the procedure while maintaining the tissue engagement mechanism in its extended position.

13. (Previously presented) A method of performing a catheter-based procedure as defined in claim 12 wherein the treatment site is the myocardium of the heart and the treatment is relieving the symptoms of ischemia.

14. (Original) A method of performing a catheter-based procedure as defined in claim 13 wherein the treatment of ischemia comprises advancing a tissue implant through the catheter and into the tissue at the treatment site.

15. (Original) A method of performing a catheter-based procedure as defined in claim 13 wherein the treatment for ischemia comprises delivering a therapeutic agent or cellular composition through the catheter to the treatment site.

16. (Currently amended) A method of performing a catheter-based procedure as defined in claim 12 wherein the treatment site is the myocardium of the heart and the procedure includes ~~treatment~~ is detecting thermal data of the tissue.

17. (Withdrawn) A method for forming a catheter-based procedure wherein the tissue engagement mechanism comprises a tube in communication with a therapeutic agent pressurized from the proximal end of the catheter when the tissue engagement mechanism contacts the tissue to deliver the agent to the tissue.

18. (Withdrawn) A method for delivering a tissue implant into myocardial tissue of the heart comprising:

providing a catheter having at least one lumen and proximal and distal ends and a radially extendible tissue engagement mechanism at its distal end configured to be extended by the presence of a device in the lumen at the distal end of the catheter;

navigating the catheter to the intended implant location in the myocardium;

inserting a delivery device carrying the implant through the lumen of the catheter while applying a distal force in a distal direction upon both the catheter and the delivery device such that the distal end of the catheter abuts the implant site; and

driving the implant through the distal end of the catheter to extend the catheter positioning mechanism to locate the distal end of the catheter so that the implant can be delivered to the intended tissue location.

19. (Currently amended) A method of performing a catheter-based procedure as defined in claim 12 wherein the treatment site is the myocardium of the heart and the procedure includes treatment is detecting electrical data of the tissue.

20. (New) A method of performing a catheter-based procedure to a particular treatment site within a patient comprising:

providing a catheter comprising a tubular shaft having a proximal end and a distal end and a radially extendible tissue engagement mechanism at its distal end, the radially extendible tissue engagement mechanism comprising a plurality of resilient members joined to the shaft, at least one control mechanism operatively associated with the resilient members and extending to the proximal end of the shaft and configured to be manipulated by a user to actuate the resilient members from a retracted position to an extended position, each of the resilient members having proximal and distal ends, the proximal ends being in operative association with the control mechanism and their distal ends being free such that movement of the control mechanism in the distal direction causes the distal ends of the members to advance radially outward away from the shaft to an extended position;

navigating the catheter so that the distal end is adjacent to the intended treatment site;

causing the tissue engagement mechanism to extend the resilient members to advance radially outward away from the shaft and into engagement with the tissue adjacent to the treatment site; and

performing the procedure while maintaining the tissue engagement mechanism in its extended position.

21. (New) A method of performing a catheter-based procedure as defined in claim 20 wherein the treatment site is the myocardium of the heart and the treatment is relieving the symptoms of ischemia.

22. (New) A method of performing a catheter-based procedure as defined in claim 21 wherein the treatment of ischemia comprises advancing a tissue implant through the catheter and into the tissue at the treatment site.

23. (New) A method of performing a catheter-based procedure as defined in claim 21 wherein the treatment for ischemia comprises delivering a therapeutic agent or cellular composition through the catheter to the treatment site.

24. (New) A method of performing a catheter-based procedure as defined in claim 20 wherein the treatment site is the myocardium of the heart and the procedure includes detecting thermal data of the tissue.